

					GenCore version 4.5
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OM protein - protein search, using sw model					
Run on:	June 18, 2001, 15:31:56 ;	Search time	50.45	Seconds	
Scoring table:	BLOSUM62	(without alignments)	242.476	Million cell updates/sec	
Searched:	390729 seqs, 57163235 residues				
Total number of hits satisfying chosen parameters:	390729				
Minimum DB seq length:	0				
Maximum DB seq length:	200000000				
Post-processing:	Maximum Match 0%				
	Listing first 45 summaries				
Database:					
1:	/SIDS6/gcadata/geneseq/geneseq/AM1980.DAT:*				
2:	/SIDS6/gcadata/geneseq/geneseq/AM1981.DAT:*				
3:	/SIDS6/gcadata/geneseq/geneseq/AM1982.DAT:*				
4:	/SIDS6/gcadata/geneseq/geneseq/AM1983.DAT:*				
5:	/SIDS6/gcadata/geneseq/geneseq/AM1984.DAT:*				
6:	/SIDS6/gcadata/geneseq/geneseq/AM1985.DAT:*				
7:	/SIDS6/gcadata/geneseq/geneseq/AM1986.DAT:*				
8:	/SIDS6/gcadata/geneseq/geneseq/AM1987.DAT:*				
9:	/SIDS6/gcadata/geneseq/geneseq/AM1988.DAT:*				
10:	/SIDS6/gcadata/geneseq/geneseq/AM1989.DAT:*				
11:	/SIDS6/gcadata/geneseq/geneseq/AM1990.DAT:*				
12:	/SIDS6/gcadata/geneseq/geneseq/AM1991.DAT:*				
13:	/SIDS6/gcadata/geneseq/geneseq/AM1992.DAT:*				
14:	/SIDS6/gcadata/geneseq/geneseq/AM1993.DAT:*				
15:	/SIDS6/gcadata/geneseq/geneseq/AM1994.DAT:*				
16:	/SIDS6/gcadata/geneseq/geneseq/AM1995.DAT:*				
17:	/SIDS6/gcadata/geneseq/geneseq/AM1996.DAT:*				
18:	/SIDS6/gcadata/geneseq/geneseq/AM1997.DAT:*				
19:	/SIDS6/gcadata/geneseq/geneseq/AM1998.DAT:*				
20:	/SIDS6/gcadata/geneseq/geneseq/AM1999.DAT:*				
21:	/SIDS6/gcadata/geneseq/geneseq/AM2000.DAT:*				
22:	/SIDS6/gcadata/geneseq/geneseq/AM2001.DAT:*				
					ALIGNMENTS
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.					
Result No.	Score	Query Match Length	DB ID	Description	
1	1084.5	96.7	215 14	R43674	1
2	1079.5	95.3	215 17	R43674	
3	1078.5	96.2	215 17	R43674;	
4	1079.5	90.1	235 17	23-MAY-1994 (first entry)	
5	1009.5	90.1	235 20	DE	
6	1004	89.6	214 17	XX	
7	993.5	88.6	213 10	XX	
8	979.5	87.4	235 12	XX	
9	973.5	86.8	195 11	XX	
10	950	84.7	208 20	XX	
11	911	81.3	238 19	XX	
					SUMMARIES
RESULT	ID				
R43674	R43674	standard; Protein; 215 AA.			
XX	XX				
AC	AC				
R43674;					
XX					
DT					
23-MAY-1994 (first entry)					
XX					
DE					
Mouse anti-bovine growth hormone Mab light chain.					
XX					
KW					
Monoclonal antibody; MAD; affinity; binding; antigen; diagnostics;					
KW					
therap; imaging; purification; biosensors.					
XX					
OS					
Mus musculus.					
XX					
PN					
XX					
PD					
09-Nov-1993.					
XX					
PP					
02-SEP-1986;					
XX					
PR					
02-SEP-1987;					
PR					
02-SEP-1987;					
PR					
19-JAN-1989;					
PR					
25-ARR-1990;					
PR					
900S-0512910.					
PA					
(ENZO-)					
ENZON INC.					
XX					
02-SEP-1986;					
PR					
86US-0902971.					
PR					
02-SEP-1987;					
PR					
87US-0092110.					
PR					
19-JAN-1989;					
PR					
89US-0299617.					
PR					
25-ARR-1990;					
PR					
900S-0512910.					
PA					
(ENZO-)					
ENZON INC.					
XX					
PR					
Bird RE, Hardman K, Ladner RC;					
XX					
WPI; 1993-367875/46.					
DR					
N-PSB; Q51535.					
DR					
XX					
Single chain poly:peptide for binding antigen - comprising light					
PT					

PT and heavy chain antigen binding portions linked by peptide linker

XX

PS Disclosure; Figure 22; 78pp; English.

CC This sequence is the mature light chain of a monoclonal antibody (Mab) and is the starting material for the production of a single chain polypeptide having binding affinity for a given antigen (Bovine growth hormone). The polypeptide comprises a first polypeptide comprising the antigen binding portion of the light chain variable region of an antibody and a second polypeptide comprising the antigen binding portion of the heavy chain variable region of an antibody and at least one peptide linker linking the first and second polypeptide chains. The resulting single chain polypeptide can be used in diagnostics, therapy (in vivo and in vitro), imaging, purifications and biosensors.

SQ sequence 215 AA;

Query Match 96.7%; Score 1084.5; DB 14; Length 215; Best Local Similarity 96.7%; Pred. No. 3.2e-59; Matches 208; Conservative 4; Mismatches 2; Indels 1; Gaps 1; PT

QY 1 ENVLQTQSPATMSASIGEKGKVTMCRASSSSYSSYLWYRKGASPKLWVYSTSNIASGV 60

Db 1 envlqtqspatmsasigekvmtcrassssyssylhwfqqksgasplkwlystsniaslqvp 60

QY 61 ARFSGSGSGSYSLTISSVYREDATATYCOQYSGY-RTRGGGTKEIKRADAAPVSI 119

Db 61 arfsgsgsgsyslisisveadaatyyccqgysgpltfagtklelkradaaaptvsi 120

QY 120 PSEGDITSGASVWFLNNYPRDINKWKIDGSRQNGVLNSMDQDSKDTYSMSSTL 179

Db 121 psseqltsqgasvvcflnnfypldkinvkwkdgserqngylnswrdqskdskdystsmsstl 180

QY 180 TLTKIEYERINSYCATEHTKTSPIVKSNRNEC 214

Db 181 tlktdeyehnhsyceathktstspivksfnrnc 215

RESULT 2
R99644
ID R99644 standard; Protein: 215 AA.

AC R99644;
XX

DT 11-OCT-1996 (first entry)

DE Anti-bGH monoclonal antibody Light chain.

XX Antibody engineering; single Polypeptide chain binding molecule; heavy chain; light chain; monoclonal antibody; Mab; bovine growth hormone; bGH; immunoaffinity purification.

XX OS Mus sp.

XX PN US5534621-A.
XX PD 09-JUL-1996.

XX PF 02-SEP-1986; 86US-0902971.

XX PR 19-JAN-1989; 89US-0299617.

XX PR 02-SEP-1986; 86US-0902971.

XX PR 02-SEP-1987; 87US-0092110.

XX PR 25-APR-1990; 90US-0512910.

XX PR 01-APR-1993; 93US-0040840.

XX PR 06-JUN-1995; 95US-0469992.

XX PA (ENZO-) ENZON LABS INC.

XX PI Bird RE, Hardman K, Ladner RC;

DR WPI; 1996-333309/33.
N-PSDB; T13734.

XX DR Immuno:purificn. using single binding chain molecule including antigen-binding parts of antibody light and heavy chain variable regions connected by a linker - is smaller, stabler and less expensive than complete antibodies

XX PT Example; Fig 22; 78pp; English.

XX CC The mature heavy chain (R99643) and mature light chain (R99644) of the mouse anti-bovine growth hormone monoclonal antibody 3C2 can be utilised in novel single chain binding molecules (R99645-48), in which the hypervariable regions from IgG 3C2 Fab are joined by peptide linkers derived from the Fv regions of an IgA class anti-phosphorylcholine myeloma antibody, MCPC-603. The single chain molecules retain the binding specificity of the light and heavy chains and have the advantages of smaller size, greater stability and reduced cost. They can be used in therapy, diagnostics, imaging, purification and biosensors.

XX SQ sequence 215 AA;

Query Match 96.3%; Score 1079.5; DB 17; Length 215; Best Local Similarity 96.3%; Pred. No. 6.5e-59; Matches 207; Conservative 5; Mismatches 2; Indels 1; Gaps 1; PT

QY 1 ENVLQTQSPATMSASIGEKGKVTMCRASSSSYSSYLWYRKGASPKLWVYSTSNIASGV 60

Db 1 envlqtqspatmsasigekvmtcrassssyssylhwfqqksgasplkwlystsniaslqvp 60

QY 61 ARFSGSGSGSYSLTISSVYREDATATYCOQYSGY-RTRGGGTKEIKRADAAPVSI 119

Db 61 arfsgsgsgsyslisisveadaatyyccqgysgpltfagtklelkradaaaptvsi 120

QY 120 PSEGDITSGASVWFLNNYPRDINKWKIDGSRQNGVLNSMDQDSKDTYSMSSTL 179

Db 121 psseqltsqgasvvcflnnfypldkinvkwkdgserqngylnswrdqskdskdystsmsstl 180

QY 180 TLTKIEYERINSYCATEHTKTSPIVKSNRNEC 214

Db 181 tlktdeyehnhsyceathktstspivksfnrnc 215

RESULT 3
R97377
ID R97377 standard; Protein: 215 AA.
AC R97377;
XX DT 13-NOV-1996 (first entry)
XX DE Murine anti-BGH Mab Light chain.
XX OS Mus musculus.
XX PN US5518889-A.
XX PR 19-JAN-1989; 89US-0299617.
XX PR 21-MAY-1996.
XX PR 02-SEP-1987;
XX PR 02-SEP-1986; 86US-0902971.
XX PR 02-SEP-1986; 86US-0902971.
XX PR 19-JAN-1989; 89US-0299617.
XX PR 02-SEP-1986; 86US-0902971.
XX PR 02-SEP-1987; 87US-0092110.
XX PR 25-APR-1990; 90US-0512910.
XX PR 01-APR-1993; 93US-004040.
XX PR 06-JUN-1995; 95US-0469988.

PA	(ENZO-)	ENZON LABS INC.	PR	23-DEC-1994;
XX			XX	94GB-0026192.
PI	Bird RE,	Hardman K,	RC:	
XX				
DR	WPI: 1996-259060/26.			
XX	N-PSDB; T29057.			
PT	Immunoassay using single chain antigen binding mol. - as replacement for labelled or immobilised antibody, are less immunogenic, easier to engineer, more stable and less expensive			
XX				
PS	Example 1; Fig 22; 78pp; English.			
XX	Portions of the heavy chain (R97376) and light chain (R97377) of murine IgG1 anti-bovine growth hormone monoclonal antibody 3C2 can be incorporated into novel single polypeptide chain binding molecules (see also W02188-90). These are expressed in host cells using DNA constructs (see also T36460-62) that include heavy and light chain encoding sequences (T29056 and T29057) joined by linker moieties. Following expression and refolding, the single chain binding molecules show the binding characteristics of the aggregate of the 2 original heavy and light chains of the variable region of the antibody.			
XX	Sequence 215 AA;			
PS	Query Match 96.2%; Score 1078.5; DB 17; Length 215; Best Local Similarity 96.3%; Pred. No. 7.4e-59; Matches 207; Conservative 4; Mismatches 3; Indels 1; Gaps 1;			
QY	ENVLTQSPAIMSASPGERKVMTMCRASSVSSSYLHWRQSKASPQKLIYSTSNLASGV 60			
Db	1 envltqspainsaspgekvmtcrassvsssylyhwrqskaspqkliystsnlasgv 60			
QY	61 ARFGSGSGTTSYSLTISSEADEATATYQOQSGY-RIFGGTKELEKRAADAPTSIFP 119			
Db	61 arfgsgsgttsytlissttisveadeatatyqoqsgy-rgfeggtkelekradaptsifp 120			
QY	120 PSESQLTSGGASVWCFLNNFYPRDINWKWIDGSSERONGVLNSWTODSKYSTYSMSTL 179			
Db	121 pseqltsggasvcflnnfydkdinvkwkdgserqngvinswtodskystysmstl 180			
QY	180 TLTKEDEYRHNSVTCATHKTSPIVKSFRNREC 214			
Db	181 mltkdeyehnhsytceatktstspivksfrnec 215			
RESULT	4			
W06178	ID W06178 standard; Protein; 235 AA.			
XX	W06178;			
AC				
XX	17-FEB-1997 (first entry)			
DT	DE			
XX	Marine A5B57 Light chain.			
XX				
kw	ribonuclease; human; bovine; pancreatic; anti-tumour therapy; ADEPT; mustard-ribonuclease; antibody; directed enzyme prodrug therapy; anti-neoplastic; Prodrug; reverse polarity; ion pair interaction; reduced immunogenicity; non-selective triggering; primer; polymerase chain reaction; PCR; HP-Rnase; Fd; F(ab')2.			
XX	Synthetic.			
PN	W09620011-A1.			
XX	04-JUL-1996.			
XX	21-DEC-1995; 95WO-GB02991.			
PR	16-AUG-1995; 95GB-0016810.			
RESULT	5			
W82746	ID W82746 standard; Protein; 235 AA.			
XX				
DE				
XX	Plasmid PEE14/A5B7muVKmuCK protein.			
AC				
XX				
DT	10-MAY-1999 (first entry)			
XX	Conjugate; cell targeting; cytotoxic drug; plasmid; fusion protein; prodrug-converting enzyme; cell surface antigen; treatment; cancer; inflammation; rheumatoid arthritis; antibody; prodrug therapy system.			
XX	Synthetic.			
OS	Mus sp.			
XX				
FT	Key	Location/Qualifiers		
FT	Peptide	1..22		
FT		/label= signal_peptide		

XX	Mus.	XX
OS		PN
XX		W0910967-A.
KW	KS1/4; chimeric antibody; light chain variable region;	PN
XX		W0910968-A.
AC	EP38767-A.	XX
R13060;		PD
XX	25-APR-1989.	XX
DE	18-APR-1989; 89EP-0303814.	PF
XX	21-APR-1988; 88US-0184522.	XX
PR	(ELIL) ELI LILLY AND CO.	11-JUL-1991.
XX	Beavers LS, Bumol TF, Gadski RA, Weigel BJ;	PR
PA	WPI: 1989-311203/43.	21-DEC-1990; 90WO-GB02017.
XX	DR	PR
PT	Recombinant DNA cdps. producing antibodies - monoclonal and chimeric derived from monoclonal antibody KS1/4.	21-DEC-1989; 89GB-0028874.
XX	PS	XX
XX	Claim 1; page 49; 89pp; English.	PA
CC	The sequence encodes the light chain of MAB KS1/4, used to construct mouse/human chimeric antibodies. KS1/4 is a murine antibody which binds to surface antigens on adenocarcinoma cells and the use of human C regions avoids immunological problems during treatment.	(CELL) CELITECH LTD.
CC	XX	PI
CC	XX	Adair JR, Athwal DS, Emtage JS;
CC	XX	DR
CC	DR	WPI: 1991-222015/30.
CC	XX	P-PSDB; R13060.
CC	XX	PT
CC	New humanised antibodies comprising CDR grafted antibody - with heavy and light chains, for use in in vivo therapy and diagnosis	XX
CC	XX	PT
CC	CC	PS
CC	CC	Disclosure; Fig 1b; 91PP; English.
CC	XX	XX
CC	The OK3T light chain sequence was deduced from the cDNA sequence isolated from a library prepared from OK3T producing cells. The library was screened with a probe complementary to a region in the mouse kappa constant region. The OK3T sequence was used in CDR-grafting experiments to prepare humanised antibodies.	XX
SQ	Sequence 213 AA;	XX
Query Match 88.6%; Score 993.5; DB 10; length 213; Best Local Similarity 90.6%; Pred. No. 1.1e-53; Matches 193; Conservative 7; Mismatches 10; Indels 3; Gaps 2;	Query Match 87.4%; Score 979.5; DB 12; Length 235; Best Local Similarity 89.2%; Pred. No. 8.4e-53; Matches 190; Conservative 6; Mismatches 14; Indels 3; Gaps 2;	
QY 3 VLTQSPAIMSASPGEKVMTCRASSVSSYLWRYQKGASPLKWLYSTSNLASGVPAR 62	QY 3 VLTQSPAIMSASPGEKVMTCRASSVSSYLWRYQKGASPLKWLYSTSNLASGVPAR 62	
Db 3 lltqspainsaspgekvmtcassssv--symwyqqkpgsspkpwidtsnlasgfar 60	Db 25 vltqspainsaspgekvmtcassssv--symwyqqkpgsspkpwidtsnlasgfar 82	
QY 63 FSSGGSGSPLSLSVTEADAAVYCOQSGYR-TREGGTKLIEKIKRADAAPVSIIFPS 121	QY 63 FSSGGSGSPLSLSVTEADAAVYCOQSGYR-TREGGTKLIEKIKRADAAPVSIIFPS 121	
Db 61 fsgsgsgtssyslissmaedaatyyqchqrsqyptfogtgkkleikradaapvsiifps 120	Db 83 fsgsgsgtssyslissmaedaatyyqchqrsqyptfogtgkkleikradaapvsiifps 142	
QY 122 SEQITSGGASVWCLNNFPRDINVWKWIDSERQNGVLNSWTDQSDKSTDYSMSSTL 181	QY 122 SEQITSGGASVWCLNNFPRDINVWKWIDSERQNGVLNSWTDQSDKSTDYSMSSTL 181	
Db 121 seqitsggashgvflnnfprdkinvkwidgserqngvlnswtdqsdksdtysmsstl 180	Db 143 seqitsggashgvflnnfprdkinvkwidgserqngvlnswtdqsdksdtysmsstl 202	
QY 182 TKDEYERHNSYTCATHTKSTSPVKSFRNEC 214	QY 182 TKDEYERHNSYTCATHTKSTSPVKSFRNEC 214	
Db 181 tkdeyernhsytcatehtktstspivksfrnec 213	Db 203 tkdeyernhsytcatehtktstspivksfrnec 235	
RESULT 8	RESULT 9	
R13060	R06477	
ID R13060 standard; Protein; 235 AA.	ID R06477 standard; protein; 195 AA.	
XX	XX	
XX	AC	
XX	R06477;	
XX	XX	
XX	03-OCT-1991 (first entry)	
XX	XX	
DE Monoclonal antibody OK3T light chain.	DE 07-JAN-1991 (first entry)	
XX	XX	
KW OK3T; light chain; humanised antibodies; CDR-grafting.	DE Light chain of anti-bovine growth hormone Mab.	
XX	XX	
OS Mus musculus.	Monoclonal antibody.	
XX	OS Mus musculus.	
Key Location/Qualifiers	XX	
Peptide 1..22	DE	
FT /label= signal peptide	XX	
Protein 23..235	KW	
FT /label= light chain	XX	
FT	OS	
	XX	
	US4946778-A.	
	XX	
	PD	
	07-AUG-1990.	
	XX	
	PR	
	19-JAN-1989; 89US-0299617.	
	XX	

PR	19-JAN-1989;	820US-0299617.
PR	02-SEP-1985;	60US-0902971.
PR	02-SEP-1987;	870US-0092210.
XX		
PA	(GENE-) GENEX CORP.	
XX		
PI	Ladner RC, Bird RE, Hardman K;	
XX		
DR	WPI; 1990-260350/34.	
DR	N-PSDB; Q05709.	
XX		
PT	Single polypeptide chain binding molecules - having light chain variable region of antibody linked by peptide to heavy chain variable region.	
XX		
PS	Disclosure; Fig 22; 68pp; English.	
XX		
CC	The Mab is produced by the cell line 3C2. It is an IgG1 with a gamma 1 heavy chain and kappa light chain. The sequence was used to produce single chain binding molecules comprising the variable regions of heavy and light chains linked by a peptide. The variable region of the sequence was prep'd by introducing a clear site and an initiation codon (atcgatg) prior to the first codon of the mature sequence and a HindIII site and termination codon (taagctt) after codon 109. The plasmid constructed to contain this portion of the sequence is pCX3173. A typical polypeptide construction is: Met-[LCVR(1-41)]-T-A-K-A-F-N-[HCVR(8-105)]-P-G-S-[LCVR(45-109)]. This construction is designated TRY40 (see Q05710, R06478). See also R06476-84.	
CC		
XX		
SQ	Sequence 195 AA;	
Query Match	86.8%; Score 973.5; DB 11; Length 195;	
Best Local Similarity	88.8%; Pred. No. 1.6e-52;	
Matches	190; Conservative	
	4; Mismatches	
	1; Indels	
	19; Gaps	
Qy	1 ENVLQSPAIMSASPGRKVIMCRASSVSSSLHWRQKGASPKWVIIKSYNSNLASGV 60	
Db	1 envlqtspaimaspgrkvimcrassvssslhwrqkgaspkwviiksynslasgv 60	
Qy	61 ARFSGSGSGTSVLTSSVVAEDAATYYCQQSGYRIFGGGRKLEIKRADAAPTVSIFPP 120	
Db	61 arfsqsgsgtsvltssvvaedaatyycqqsgyrifgggrkleikradaaptvsiipp 101	
Qy	121 SSEQLTSGGASVCFLLNNYFPDINVKKWIDGDSERQNGVLSNSTQDSKSYMSMILT 180	
Db	102 sseqltsggashvvcflnnfyfpdinvkkwidgdsersqgqvlswtdqskdstysmstl 161	
Qy	181 LTKDEYERNSYTCATHKTSPIVSKFNRNC 214	
Db	162 ltkdeyernsytcathktstspivksfnrc 195	
XX		
SQ	Sequence 208 AA;	
Query Match	84.7%; Score 950; DB 20; Length 208;	
Best Local Similarity	88.1%; Pred. No. 4.6e-51;	
Matches	185; Conservative	
	9; Mismatches	
	14; Indels	
	2; Gaps	
Qy	1 ENVLQSPAIMSASPGRKVIMCRASSVSSSLHWRQKGASPKWVIIKSYNSNLASGV 60	
Db	1 envlqtspaitaaslgqktticcsassv--synhwyqgksgtspkpwyeisklasgv 58	
Qy	61 ARFSGSGSGTSVLTSSVVAEDAATYYCQQSGYRIFGGGRKLEIKRADAAPTVSIFPP 120	
Db	59 arfsqsgsgtsvltssvvaedaatyycqqsgyrifgggrkleikradaaptvsiipp 118	
Qy	121 SSEQLTSGGASVCFLLNNYFPDINVKKWIDGDSERQNGVLSNSTQDSKSYMSMILT 180	
Db	119 sseqltsggashvvcflnnfyfpdinvkkwidgdsersqgqvlswtdqskdstysmstl 178	
Qy	181 LTKDEYERNSYTCATHKTSPIVSKF 210	
Db	179 ltkdeyernsytcathktstspivksfn 208	
XX		
RESULT	10	
Y44175		
ID		
XX	Y44175 standard; Protein; 208 AA.	
AC		
XX		
DT	01-FEB-2000 (first entry)	
XX		
DE	Mab Fab13B5 light chain protein sequence.	
XX		
DE	W83042	
ID		
XX		
AC		
XX		
DT		
XX	15-MAR-1999 (first entry)	
DE		
XX		
DE	Anti-Fas Mab HFE7A light chain.	
XX		
DE		
XX		
DE	HFE7A; monoclonal antibody; mouse; Fas; humanised antibody; apoptosis; HFE7A; autoimmune disease; Hashimoto's disease; systemic lupus erythematosus; graft versus host disease; Sjogren syndrome; pernicious anaemia; Addison's disease; scleroderma; Goodpasture syndrome; Crohn's disease; sterility; rheumatoid arthritis; autoimmune haemolytic anaemia; myasthenia gravis; multiple sclerosis; Basedow's disease; thrombopenia purpura; insulin-dependent diabetes; allergy; atopy; arteriosclerosis; myocarditis; cardiomyopathy;	
XX		
OS		
OS		
PN		
FR277/285-A1.		
XX		
PD	15-OCT-1999.	

XX	OS	KW	glomerular nephritis; hypoplastic anaemia; hepatitis; AIDS; transplant rejection; therapy; complementarity determining region; CDR.
XX	Mus	musculus.	
XX	FH	Location/Qualifiers	
XX	FT	1..20	
XX	FT	/label= Sig_peptide	
XX	FT	21..238	
XX	FT	/label= Mat_protein	
XX	FT	21..131	
XX	FT	/label= Variable	
XX	FT	132..238	
XX	FT	/label= Constant	
XX	FT	44..58	
XX	FT	/label= CDR_L1	
XX	FT	/note= "claim 9"	
XX	FT	74..80	
XX	FT	/label= CDR_L2	
XX	FT	/note= "claim 9"	
XX	FT	113..121	
XX	FT	/label= CDR_L3	
XX	FT	/note= "claim 9"	
XX	PN	AU9859701-A.	
XX	PD	08-OCT-1998.	
XX	PF	98AU-0059701.	
XX	PR	30-MAR-1998;	
XX	PR	08-OCT-1997;	
XX	PR	01-APR-1997;	
XX	PR	25-JUN-1997;	
XX	PA	(SANY) SANKYO CO LTD.	
XX	PA	Akio S, Hideyuki H, Hiroko Y, Jun O, Kimihisa I;	
XX	PI	Masahiko O, Nobufusa S, Shin Y, Tohru T;	
XX	XX	WPI; 1998-543440/47.	
XX	DR	N-PSDB; V70130.	
PS	PT	New antibodies and proteins bind conserved epitope of Fas antigen - used to evaluate drugs in animal models and to treat Fas-associated diseases e.g. autoimmune disease, allergy, atopy, arteriosclerosis, myocarditis, hepatitis and AIDS	
PS	PT	This is the amino acid of the light chain of murine anti-human Fas monoclonal antibody HFE7A. cDNA (see V70130) encoding the light chain was obtained from HFE7A-secreting hybridoma (FERM BP-5828) RNA by RT-PCR (see V70127-28). The invention provides humanised HFE7A antibodies (see W83031-37) produced by CDR grafting. These antibodies are capable of inducing apoptosis in abnormal cells expressing Fas, and of inhibiting Fas-induced apoptosis in normal cells. They are used to evaluate, in animal models, treatments of diseases that involve Fas/Fas ligand interactions, and also to treat such diseases, including autoimmune disease (e.g. systemic lupus erythematosus, Hashimoto's disease, graft versus host disease, Sjogren syndrome, pernicious anaemia, Addison's disease, scleroderma, Goodpasture syndrome, Crohn's disease, rheumatoid arthritis, autoimmune haemolytic anaemia, sterility, myasthenia gravis, multiple sclerosis, Basedow's disease, thrombopenia purpura and insulin-dependent diabetes), allergies, atopy, arteriosclerosis, myocarditis, cardiomyopathy, glomerular nephritis, hypoplastic anaemia, hepatitis, AIDS and transplant rejection (all claimed).	
SQ	Sequence	238 AA;	

SQ	Sequence	238 AA:
QY	3 VLTQSPAIMSASPGERVMTICRASSV--SSSYLHWYRQKGASPKLWVYSTSNIASGV	59
Db	23 vtqspaslavslgratiskasqsvdygdsynwyqkpgqpkillyaasnlesgi	82
QY	60 PARFESSGSGSYLSSVDAEATYYCQOYS-GYRTGGGTKEIKRADAAPVNSIF	118
Db	83 parfsgsgsgtfdflnhpveeedatyyccqnsnedprtfgggtkleikradaaptvsif	142
QY	119 PPSSEDTSGCASYCFLNNYPRDINVKWKGSRONGVLNSWTDQSKDSTSYSMST	178
Db	143 Ppsseqtsgasvvcflnnypkdnvkwidgserqngvlnswtdqskdystsmsst	202
QY	179 LTLTKEYERHNSYCEATHKTSTSPIVKSFNRNEC	214
Db	203 ltlkdeyerhnsytcathktstspivksfnec	238
RESULT	13	
W90898		
ID	W90898 standard; Protein; 238 AA.	
AC		
XX	W90898;	
XX		
DT	08-AUG-2000 (first entry)	
DE	Murine anti-Fas antibody HFE7A light chain protein.	
XX		
KW	Fas: antibody; murine; anti-inflammatory; anti-anemic; anti-diabetic; anti-allergic; anti-arthritis; anti-viral; immunomodulatory; cardiant; dermatological; immunosuppressive; thymomimetic; antirheumatic; nephrotoxic; antiinflammatory; antiarteriosclerotic; anti-Fas; nephrotoxic; antiangiogenic; neuroprotective; antiarteriosclerotic; hepatotrophic; humanized; apoptosis; systemic lupus erythematosus; HFE7A; Hashimoto disease; rheumatoid arthritis; graft versus host disease; Sjögren's syndrome; amnesia; Addison's disease; scleroderma; Goodpasture syndrome; Crohn's disease; multiple sclerosis; Basedow's disease; thrombopenia purpura; insulin dependent diabetes mellitus; allergy; insulin dependent diabetes mellitus; arteriosclerosis; myocarditis; cardiomyopathy; glomerulonephritis; hepatitis (fulminant, chronic, viral (B, C or D) or alcoholic); and transplant rejection. (I) selectively inhibit apoptosis in normal cells but selectively induce it in abnormal cells. They bind to both human and murine Fas so can be evaluated in murine disease models. (I) act on the active site of Fas, i.e. they mimic the native ligand, do not induce liver disease, and have reduced risk of inducing a human anti-murine antibody response. This sequence represents a murine anti-Fas monoclonal antibody HFE7A light chain described in the method of the invention.	
CC		
SQ	Sequence	238 AA:
XX		
Query Match	81.3%	Score 911; DB 21; Length 238;
Best Local Similarity	81.0%	Pred. No. 1.2e-48; Mismatches 21; Indels 4; Gaps 2;
Matches	175; Conservative	
QY	3 VLTQSPAIMSASPGERVMTICRASSV--SSSYLHWYRQKGASPKLWVYSTSNIASGV	59
Db	23 vtqspaslavslgratiskasqsvdygdsynwyqkpgqpkillyaasnlesgi	82
QY	60 PARFESSGSGSYLSSVDAEATYYCQOYS-GYRTGGGTKEIKRADAAPVNSIF	118
Db	83 parfsgsgsgtfdflnhpveeedatyyccqnsnedprtfgggtkleikradaaptvsif	142
QY	119 PPSSEDTSGCASYCFLNNYPRDINVKWKGSRONGVLNSWTDQSKDSTSYSMST	178
Db	143 Ppsseqtsgasvvcflnnypkdnvkwidgserqngvlnswtdqskdystsmsst	202
QY	179 LTLTKEYERHNSYCEATHKTSTSPIVKSFNRNEC	214
Db	203 ltlkdeyerhnsytcathktstspivksfnec	238
RESULT	14	
R76086		
ID	R76086 standard; Peptide; 219 AA.	
XX		
AC		
R76086;		
XX		
PR	30-SEP-1998; 98JP-0276881.	
PR	30-SEP-1998; 98JP-0276882.	
XX		
PA	(SANY) SANKYO CO LTD.	
XX		
PI	Serizawa N, Haruyama H, Nakahara K, Tamaki I, Takahashi T;	
DR	WPI: 2000-258930/23.	
XX		
PT	New humanized anti-Fas antibody, useful for treating or preventing e.g. inflammatory or autoimmune disease, induces apoptosis selectively in cells with abnormal Fas/Fas ligand systems -.	
PT	Example reference 4; Page 104; 263pp; English.	
CC	This invention describes a novel humanized anti-Fas antibody-like molecule (I) that, induces apoptosis in cells with an abnormal Fas/Fas ligand system, by binding to Fas on the cell surface, and prevents	
CC		
OS	apoptosis in cells with a normal system, by inhibiting binding between Fas and its ligand. The products of the invention have anti-inflammatory, anti-anemic, anti-diabetic, anti-allergic, anti-arthritis, antiviral, immunomodulatory, dermatological, immunosuppressive, thymomimetic, antiaromatic, nephrotoxic, antiinflammatory, neuroprotective, antiarteriosclerotic, cardiant, and hepatotoxic activity. (I) induce apoptosis by binding to cell surface Fas or inhibit it by competitive inhibition of ligand binding. (I) are used to treat and/or prevent diseases associated with the Fas/Fas ligand system, especially systemic lupus erythematosus, Hashimoto disease, rheumatoid arthritis, graft versus host disease, Sjögren's syndrome, pernicious or hypoplastic anemia, Addison's disease, scleroderma, Goodpasture syndrome, Crohn's disease, autoimmune hemolytic anemia, sterility, myasthenia gravis, multiple sclerosis, Basedow's disease, thrombopenia purpura, insulin dependent diabetes mellitus, allergy, arteriosclerosis, myocarditis, cardiomyopathy, glomerulonephritis, hepatitis (fulminant, chronic, viral (B, C or D) or alcoholic), and transplant rejection. (I) selectively inhibit apoptosis in normal cells but selectively induce it in abnormal cells. They bind to both human and murine Fas so can be evaluated in murine disease models. (I) act on the active site of Fas, i.e. they mimic the native ligand, do not induce liver disease, and have reduced risk of inducing a human anti-murine antibody response. This sequence represents a murine anti-Fas monoclonal antibody HFE7A light chain described in the method of the invention.	
XX		
Sequence	238 AA:	
XX		
Query Match	81.3%	Score 911; DB 21; Length 238;
Best Local Similarity	81.0%	Pred. No. 1.2e-48; Mismatches 21; Indels 4; Gaps 2;
Matches	175; Conservative	
QY	3 VLTQSPAIMSASPGERVMTICRASSV--SSSYLHWYRQKGASPKLWVYSTSNIASGV	59
Db	23 vtqspaslavslgratiskasqsvdygdsynwyqkpgqpkillyaasnlesgi	82
QY	60 PARFESSGSGSYLSSVDAEATYYCQOYS-GYRTGGGTKEIKRADAAPVNSIF	118
Db	83 parfsgsgsgtfdflnhpveeedatyyccqnsnedprtfgggtkleikradaaptvsif	142
QY	119 PPSSEDTSGCASYCFLNNYPRDINVKWKGSRONGVLNSWTDQSKDSTSYSMST	178
Db	143 Ppsseqtsgasvvcflnnypkdnvkwidgserqngvlnswtdqskdystsmsst	202
QY	179 LTLTKEYERHNSYCEATHKTSTSPIVKSFNRNEC	214
Db	203 ltlkdeyerhnsytcathktstspivksfnec	238
RESULT	14	
R76086		
ID	R76086 standard; Peptide; 219 AA.	
XX		
AC		
R76086;		
XX		
PR	21-NOV-1995 (first entry)	
XX		
MAB	55.1 light chain.	
XX		
DE		
XX		
KW	Antigen binding structure; complementarity determining region; CDR; CA55.1; colorectal cancer; tumor-associated antigen; hybridoma; monoclonal antibody; MAB; immunotherapy; therapy; diagnosis; transgenic animal; transgenic plant; antibody engineering; humanized antibody; immunotoxin.	
KW		
Mus	' sp.	
XX		
W09515382-A.		
DN		
PS	08-JUN-1995.	
XX		
CC		
CC		
PP	29-NOV-1994; 94WO-GB02610.	
XX		

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